



South Korea's Contribution to the Act-A Program: Leading by Example

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Executive summary

- Eurasia Group's analysis suggests that leaving low- and lower-middle-income countries, or LLMICs (see appendix for full country list), to fend for themselves amid the Covid-19 pandemic will cause significant economic damage that puts at risk decades of economic progress.
- The Access to Covid-19 Tools Accelerator (Act-A) program is the only "end-to-end," complete global solution across tests, treatments, and vaccines for tackling the pandemic. The world needs strong leadership and international cooperation to make this program a success. The Act-A program needs \$38 billion, of which \$28.2 billion is still currently outstanding.
- Rapid, widespread, and equitable vaccination, tests, and treatments will save countless lives in LLMICs, allowing policymakers' focus to return to the core development goals of raising living standards, empowering women, and marginalized communities, and strengthening institutions.
- South Korea has already made a major contribution to this initiative, and the government has been vocal about its solidarity with developing countries on equitable vaccine distribution.
- Act-A is an opportunity to create growth opportunities for Korean companies abroad, particularly for South Korea's manufacturing sector, which is heavily reliant on Southeast Asian markets for growth. To date, South Korea has contributed \$11 million to the Act-A and the Covax Advance Market Commitment (AMC), which will help to finance the equitable distribution of a Covid-19 vaccine to LLMICs.
- This assistance will more than pay for itself in economic gains for South Korea. The benefits are estimated to be in the range of 6.2 trillion won (\$5.4 billion) in 2020-21 and 19.6 trillion won (\$17 billion) in 2020-25, with key exposures in tourism and manufacturing.
- Moreover, South Korea's effective Covid-19 response can serve as a leadership blueprint for other countries on how to prepare and implement strong public health policies.

Introduction

South Korea's economy has developed at a remarkable pace over the last three decades. A recipient of official development assistance (ODA) itself until 1995, South Korea has since leveraged its prosperity to make significant contributions to the development of other countries. South Korea is now a member of the Development Assistance Committee (DAC) within the Organization for Economic Cooperation Development (OECD), and the Korean government supports various multilateral efforts within the frameworks of the UN and the WHO. In addition to making financial contributions, the country lends valuable expertise in supporting public health, education, and sustainable rural development in many of the world's poorest countries.

What is Act-A?

Act-A is the only end-to-end global solution that aims for equitable access, building on its public health expertise and offering risk mitigation for the investment made. It achieves this through four focal points: 1) vaccine risk pooling, to increase each country's chances of having access to the "winning candidate"; 2) limiting operational risk by bringing together the best global expertise across fields; 3) providing an end-to-end solution across tests, treatments, and vaccines; and 4) focusing on equitable access to ensure that Covid-19 tools will be delivered in the most efficient way to those who need them the most, restarting all economies and protecting international mobility, trade, and economic activity.

As a major economic player in Asia, South Korea is well-positioned to be a leader in the fight against Covid-19 in the developing world while also unlocking considerable benefits for the Korean economy. This report explores why supporting the Act-A program—and in particular, Covax-AMC—is the right course of action for Korea, examining the benefits from both a geopolitical and an economic perspective. The analysis suggests that there is a clear self-interested case for South Korea's continued involvement. Supporting LLMICs through Act-A and encouraging other countries to join will not only help to minimize the loss of life attributable to Covid-19; South Korea's financial contributions will more than pay for themselves through improved opportunities for Korean firms and workers. The following sections focus on three main themes associated with South Korea's contributions to Act-A:

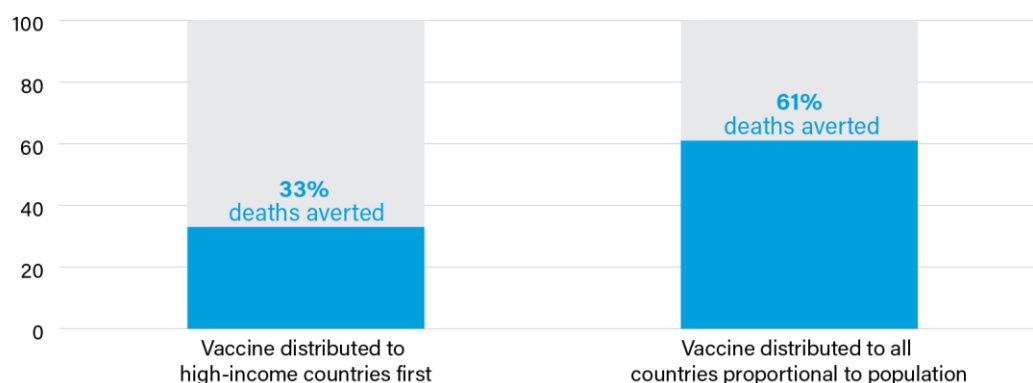
- Saving lives through a multilateral approach
- Importance of South Korean leadership
- Economic benefits to South Korea

Saving lives through a multilateral approach

Covid-19 is a threat to both human health and economic prosperity, and the pandemic is forcing policymakers around the world to make difficult choices. Governments in low- and lower-middle-income countries have fewer options than others, as many do not have the healthcare capacity to identify and treat all new cases nor the fiscal space to provide sufficient support to businesses and households. Poverty is on the rise, and more than half of the world's population still lacks access to quality health services.

Epidemiological modeling suggests that an equitable approach to the Covid-19 vaccine could significantly reduce deaths from the pandemic. Northeastern University's Laboratory for the Modeling of Biological and Socio-technical Systems has run counterfactual scenarios examining what would have happened if a vaccine had been available starting in mid-March. In the first scenario, approximately 50 high-income countries received the first 2 billion doses (out of 3 billion) of an 80% effective vaccine. In the other scenario, all countries received 3 billion doses in proportion to their populations. This exercise showed that equitable distribution would avert 61% of deaths, compared to just 33% that would be averted with distribution to high-income countries first. This equates to tens of thousands of lives that could be saved with support for Act-A from South Korea and other donor countries.

Modeled percentage of deaths (compared to no vaccine)*

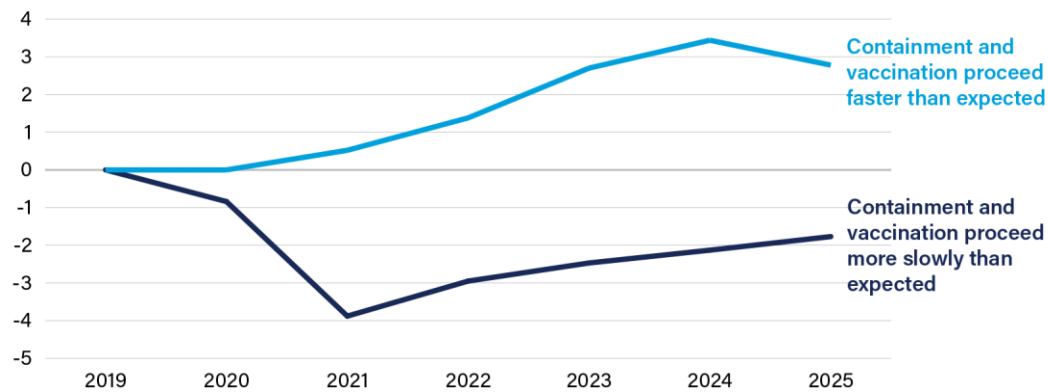


*Bill & Melinda Gates Foundation, 2020 Goalkeeper's Report
Source:

Covid-19 is also having direct and profoundly negative effects on developing economies. Disruptions to output are common when tackling pandemics, but the stringent lockdown measures needed to contain Covid-19 have produced severe shocks to global supply and demand. The resulting global recession has exacerbated inequality. People working in the informal economy or on hourly or daily wages have been especially hard-hit. In the poorest regions, some communities do not have access to adequate housing, water, and sanitation to adhere to take sufficient precautions against the virus. For these reasons, widespread and equitable vaccination will be critical to putting many LLMICs back on the path toward inclusive growth and development.

The economic challenges associated with Covid-19 raise the real possibility of negating decades of poverty reduction and other improvements, effectively canceling out the impact of aid contributions already made. In its latest forecasts, the IMF projects that low-income economies will contract by 1.2% in real terms in 2020, followed by a 4.9% rebound in 2021. However, the IMF acknowledges that emerging markets' trajectories could diverge sharply from its baseline forecasts depending on epidemiological developments. A best-case scenario, which would be more likely if a vaccine were distributed fairly, could see emerging-market real GDP climb to 0.5% above the Fund's base case by the end of 2021. Conversely, slower and less effective response to Covid-19 could pull emerging-market real GDP down by nearly 4% from the IMF's baseline (please see graph highlighting divergence from IMF baseline forecasts in each scenario). The difference in outcomes between best- and worst-case scenarios is a gaping 4.5% over two years, or the equivalent of billions of dollars, driven largely by differences in virus outcomes.

Emerging markets real GDP, difference to baseline forecast by scenario (%)



Note: Forecasts for emerging markets, not low and lower middle-income countries specifically
Source: IMF Global Economic Update.

Covid-19 is a global problem, and a full return to normal will not be possible until the virus is contained and then eradicated across the world. This requires a multilateral effort. With the largest portfolio of tools in the world, including diagnostics, hospital treatments, and testing, investing in Act-A increases the greatest chance that individual countries have of accessing a viable vaccine rather than entering into bilateral agreements and ending up with a vaccine that is ultimately not viable. Moreover, a multilateral effort rather than bilateral agreements improves international relations, regional stability, and diplomatic outcomes for LLMICs. Fair and rapid vaccine distribution will help prevent the worst-case outcomes, saving thousands of lives while also helping to improve economic prospects in developed and developing countries alike.

Importance of South Korean leadership

Through Act-A, South Korea can lead by example, helping to circulate best practices and inform other countries about the “South Korean model” of pandemic response while also ensuring that they have the proper tools to implement it. The country’s success in “flattening the curve” quickly was made possible by comprehensive testing and tracing, as well as widespread adherence to public health recommendations, including public mask-wearing. As other advanced economies struggled to contain the pandemic, South Korea succeeded in minimizing the death toll from Covid-19, owing also to its strong healthcare system and its policy experience in containing the spread of MERS and SARS.

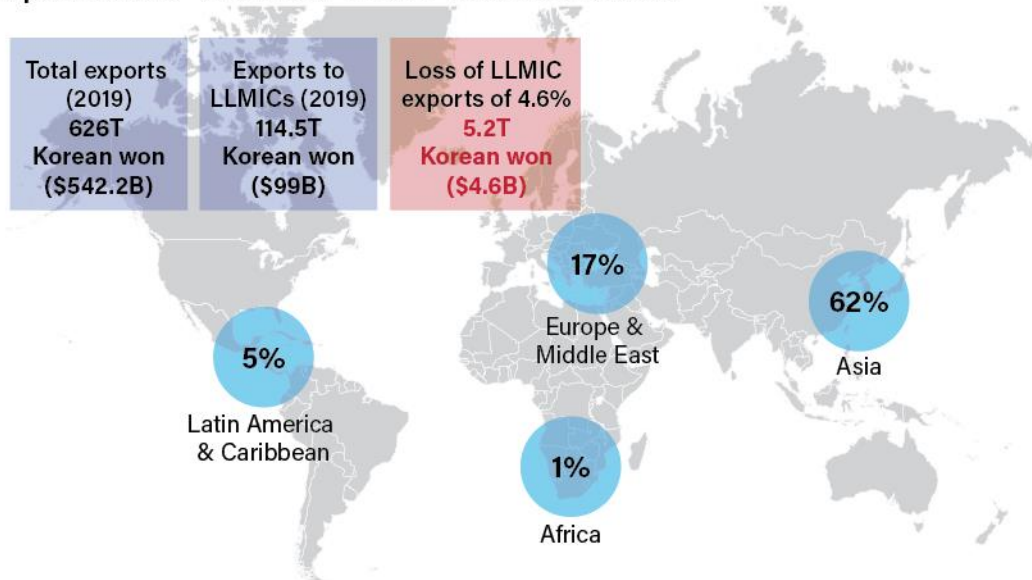
South Korean President Moon Jae-in has vocally called for equitable vaccine distribution, and the government’s early commitment to Act-A highlights South Korea’s solidarity with developing countries and commitment to multilateral agreements, particularly those in Southeast Asia. As the Moon administration seeks to deepen its ties in the region through its New Southern Strategy, public health diplomacy constitutes a novel form of aid and technical expertise that the government can deploy to maximize its influence. South Korea’s example will also offer an alternative to the growing influence of China and boost international cooperation by placing health at the forefront of the international agenda. South Korea’s participation in Act-A can demonstrate to the ASEAN countries and other players in the region that open and democratic Asian societies can also be highly successful in overcoming major coordination challenges, such as those needed to contain Covid-19.

For South Korea, contributions to Act-A may help to bolster national security, as well, as North Korea is one of the 92 LLMICs eligible to receive vaccine assistance through the Covax-AMC program. Providing South Korea’s neighbors with access to a vaccine could help to support dialogue with Pyongyang and continue to ease tensions on the Korean Peninsula. It may also contribute to social stability in the North, defusing a potential humanitarian crisis on South Korea’s border if Covid-19 is allowed to go on unchecked in North Korea. Moreover, a multilateral assistance program like Covax-AMC will help to engage the North Korean authorities in a broader, international dialogue on public health that is held separate from the broader security tensions at play in the region, particularly those involving the US, China, and Japan.

Economic benefits to South Korea

South Korea is renowned for its rise into a developed, high-income economy in just a few decades, bringing it into the ranks of the OECD and the G-20. South Korea remains one of the fastest-growing developed markets in the world, largely due to its export-oriented growth model and its ability to harness external demand, partly in the US and Europe but also in the Asia-Pacific region. Because of South Korea's sizable trade linkages to Southeast Asian economies, many sectors of the Korean economy are at risk from a slowdown in economic activity in the region, as well as supply-side disruptions from markets such as Vietnam. Equitable vaccination will help to safeguard growth over the medium term for South Korea's trade partners and for South Korea itself.






Exports to low- and lower-middle-income countries



Note: World Bank - World Integrated Trade Solution data.
Source: Eurasia Group

Korean merchandise exports to Covax-AMC-eligible LLMICs stood at about 115 trillion won (\$99.2 billion) in 2019. The vast majority goes to Asian LLMICs. Vietnam, the Philippines, and India, which are South Korea's largest LLMIC trade partners, collectively purchase over 82 trillion won (\$71.6 billion) of the country's exports each year. South Korea's largest companies rely on countries in Southeast Asia not only as a source of growing demand; many Korean exporters also source inputs and intermediates major suppliers in the region. Because of these economic links alone, it is in South Korea's interest to support the recovery of LLMIC economies, given the drastic differences in growth outcomes that could result from access to vaccines. Just a 4.6% cumulative reduction in imports by LLMICs in 2020-21 (as implied by the downside scenario for emerging markets in the latest IMF forecasts) would equate to a reduction in exports of over 5.2 trillion won (\$4.6 billion). This sum is many times Korea's contribution to Covax-AMC to date of \$11 million, making it economically worthwhile to support Act-A purely from the perspective of export growth.

South Korea's economic value at risk by sector

	International exposure (₩, T)	Of which, derived from LLMICs	LLMIC exposure (₩, T)	Possible economic losses (₩ T, 2020-21)	Possible economic losses (₩ T, 2020-25)
 Tourism	25.9	10.7%	2.8	1.0	2.3
 Education	3.4	23.4%	0.8	0.1	0.2
 Manufacturing	626.3	17.6%	110.5	5.1	16.6
 Financial services	3.1	43.9%	1.4	0.1	0.2
 IT	5.2	41.9%	2.2	0.1	0.3
Total				6.3	19.6

Source: Eurasia Group

Tourism: Tourism is a fast-growing industry in South Korea, accounting for 4.7% of GDP and representing 5.3% of total employment. The country relies on its Asian neighbors for a significant portion of the sector's international tourism spending. Top sending countries among the Covax-AMC-eligible LLMICs include Vietnam (making up 3.2% of total yearly tourists), the Philippines (2.9%), Indonesia (1.6%), India (0.8%), and Mongolia (0.6%). Korean Air, the largest airline in the country and its flagship carrier, saw consistent growth in passenger demand from Southeast Asia prior to Covid-19. In 2019 alone, the airline increased passenger revenue from its Southeast Asian operations by 10%, or by more than 7 trillion won. Travel demand will be dampened in any scenario, but the risk of significant restrictions on countries with continued outbreaks could have an outsize effect on the tourism industry. Overall, we estimate that about 893 billion won in foreign tourist spending could be lost in 2020-21 owing to travel restrictions. By 2025, the total figure could rise to 2.3 trillion won.

Education: About 101,000 foreign university students studied in South Korea in 2019 and spent close to 34 trillion won on tuition and living costs. LLMIC students from Covax-AMC-eligible countries, who make up 23% of total foreign students, contributed about 8.3 billion won. Excluding Chinese students (who account for 50% of all foreign university students in South Korea), the majority of international students come from LLMICs in the Asia Pacific region, including Vietnam, Mongolia, and Uzbekistan, the top three LLMIC sending countries.

Many universities could be disrupted by continued travel bans that make it difficult for LLMIC students to continue to attend. For example, at Korea University, a prestigious university in Seoul, over 10% of enrolled students are international, hailing predominantly from Southeast Asian countries. Overall, accounting for travel restrictions and the possibility of online classes, we estimate South Korea could lose 86.8 billion won in student spending in 2020-21 and that this figure could rise to 173.6 billion won over the next five years in the event of a poor vaccination outcome for developing countries.

Manufacturing: The manufacturing sector has historically been a critical one for South Korea, helping to transform the country into a global industrial powerhouse. South Korea has significant trade linkages to LLMICs, with manufacturing exports to these countries valued at over 18% of the total (547.3 trillion won). Covax-AMC-eligible LLMICs collectively purchase over 94.4 trillion won from Korean manufactures each year. Major markets for South Korean manufacturers include Vietnam (9.2% of total manufacturing exports), India (2.8%), and the Philippines (1.3%).

A scenario in which limited vaccine access in LLMICs continues to disrupt supply chains and depress demand would have a considerable impact on the sector. Major South Korean firms could face a sizable hit to revenues as a result of slow growth in LLMICs. Samsung, for example, derived 18% of its 2019 earnings from Asia (excluding China) and Africa, accounting for over 41 trillion won. For

Hyundai Motor Company, a leader in South Korea's automotive industry, Asia generated more sales than any other region, including Europe and North America. If global vaccination efforts stall, we estimate that South Korea could lose 5.1 trillion won in manufacturing export revenues owing to exposure to LLMIC markets in 2020-21. Over five years, the economic benefits at risk could rise to 16.6 trillion won.

Financial services: South Korea exported 3.1 trillion won in financial services last year, with about 44% of exports going directly to LLMICs. South Korea's main trade partners are China, the US, Japan, and the EU. However, Southeast Asia is also a significant market for South Korean financing, collectively purchasing over 28% of its financial services exports on an annual basis. Other significant regions include the Middle East (accounting for 6% of financial services receipts) and Central and South America (2%).

In a downside scenario for LLMICs, South Korea's financial sector could stand to lose 62.3 billion won owing to exposure to LLMICs in 2020-21 and 204.4 billion won in total over the next five years. Top financial service companies in South Korea include Mirae Asset Daewoo, Hana Financial Group, and KB Financial Group, all of which could see significant disruptions in the years to come. Mirae Asset Daewoo engages in global brokerage, investment banking, and trading businesses in 11 foreign countries, including Mongolia, Vietnam, Indonesia, India, China, and Brazil. KB Financial Group also relies on emerging markets in the Southeast for growth, including Cambodia, Laos, Myanmar, and Vietnam. Recently, KB Financial Group added four new locations in 2019 to reach a total of stakes in 42 different companies in its Southeast Asian network. Similarly, Hana Financial Group has built a sizeable business in Myanmar and Indonesia and would also stand to lose from the inequitable distribution of a vaccine for Covid-19.

Information technology and communications: On average, South Korea exports 5.2 trillion won in ICT services yearly, with about 2.2 trillion won going to Covax-AMC-eligible LLMICs. Reduced import growth in these markets brought on by lack of vaccine access would put 99.3 billion won in receipts at risk in 2020-21 and 325.5 billion won in 2020-25. Many Korean companies also rely on business process operations services provided in LLMICs; while the economic impact of this is not as directly calculable as direct trade exposure, it will act as a multiplier effect for the complications for South Korea's ICT sector as a whole. Moreover, the pandemic is likely to affect the supply of raw materials and disrupt the electronics value chain, driving up costs in the sector and causing significant disruptions for South Korean firms, especially multinationals.

Conclusion

South Korea's commitment to Act-A and the Covax-AMC initiative can showcase the country's belief in multilateralism and save countless lives in LLMICs. In addition, South Korea's support can help LLMICs access all the tools that Act-A can provide, including the full portfolio of vaccine candidates, increasing the probability of countries receiving a viable vaccine.

It could also help to set developing economies—particularly those in Southeast Asia, with which Korea enjoys increasingly close relations—back on the path to growth. There is a clear self-interest case for South Korea to continue to participate and encourage others to do so. Act-A will not only bring into focus South Korea's expertise in crisis management and public health, but it could also facilitate continued engagement with North Korea and demonstrate to other countries in the region that there are alternative paths to prosperity to the Chinese model.

In addition, supporting LLMICs through Act-A will help to boost external demand for South Korea's manufacturing exports, increase flows of students and international tourists to its borders, and grow South Korea's fast-growing regional markets for financial and ICT services.

In sum, the case for supporting Act-A and Covax-AMC is clear. South Korea's \$11 million contributions to Covax-AMC could help avert close to 28% of Covid-related deaths, boost real GDP by 3-4% in LLMICs by end-2021, and unlock 19.6 trillion won (\$17 billion) in economic benefits for Korean companies and wage-earners over the next five years. Act-A is a major opportunity for South Korea to cement its status as a global leader by taking multilateral, holistic action to end the Coronavirus pandemic.

Appendix: Methodology for economic analysis

Economic analysis is based on the expected negative effects of sustained outbreaks in LLMICs implied by the difference between the downside and baseline scenarios of the IMF's October 2020 World Economic Outlook forecasts. The impact on each of the key affected sectors was calculated differently, with a focus on the impact of travel bans, lost export purchasing power, and—in the case of net energy exporters—affected global commodity prices.

In each case, the sector was assessed in terms of its contribution to the economy, as well as its exposure to global markets. Sector exposures were divided by the contribution provided by LLMICs to arrive at a total “LLMIC exposure” figure for the sector. This figure was then run through a baseline and downside scenario to calculate possible economic losses under better and worse virus scenarios in LLMICs.

The approach is summarized in the table below:

Travel bans	Export purchasing power	Global commodity prices
<i>Lost spending in-country due to travel restrictions</i>	<i>Lost in-country revenue due to lower exports</i>	<i>Lost in-country revenue due to reduced global prices</i>
Spending from international travelers	Manufacturing/services exports	Commodity outputs
Share of spending from LLMICs	% to LLMICs	Possible price change from lost LLMIC demand
		Possible reduction in exports to LLMICs owing to weaker demand
Product: exposure	Product: exposure	Product: exposure
Scenario 1: LLMIC travelers restricted	Scenario 1: worse trade growth outcome	Scenario 1: worse commodity price outcome; weaker demand
Scenario 2: travel largely normal	Scenario 2: better trade growth outcome	Scenario 2: better commodity price outcome; better demand
Delta: value at risk	Delta: value at risk	Delta: value at risk
Applied to: Tourism	Applied to: ICT, FS	Applied to: Energy

LLMIC country list

For the purposes of the analysis, Eurasia Group defines LLMICs as the low- and lower-middle-income countries that are eligible to access the Covid-19 vaccine through Gavi's Advance Market Commitment (AMC), which aims to secure doses of Covid-19 vaccines for poorer countries through the COVAX Facility, a mechanism to enable participating countries to have access to the world's largest and most diverse Covid-19 vaccine portfolio.

COVAX AMC-eligible countries include all economies with Gross National Income (GNI) per capita under US\$ 4,000, in addition to other World Bank International Development Association (IDA)-eligible economies. The list includes the following **92 states**:

- **Low income:** Afghanistan, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Dem. Rep. of Congo, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Dem. People's Rep. of Korea, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Somalia, South Sudan, Syrian Arab Republic, Tajikistan, Tanzania, Togo, Uganda, Yemen
- **Lower-middle income:** Angola, Algeria, Bangladesh, Bhutan, Bolivia, Cabo Verde, Cambodia, Cameroon, Comoros, Rep. of Congo, Côte d'Ivoire, Djibouti, Egypt, El Salvador, Eswatini, Ghana, Honduras, India, Indonesia, Kenya, Kiribati, Kyrgyz Republic, Lao PDR, Lesotho, Mauritania, Fed. Sts. of Micronesia, Moldova, Mongolia, Morocco, Myanmar, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Philippines, São Tomé and Príncipe, Senegal, Solomon Islands, Sri Lanka, Sudan, Timor-Leste, Tunisia, Ukraine, Uzbekistan, Vanuatu, Vietnam, West Bank and Gaza, Zambia, Zimbabwe
- **Additional IDA eligible:** Dominica, Fiji, Grenada, Guyana, Kosovo, Maldives, Marshall Islands, Samoa, St. Lucia, St. Vincent and the Grenadines, Tonga, Tuvalu

Appendix sources

Eurasia Group analysis leveraged numerous sources to compile the necessary data and assumptions underlying the report and its economic calculations.

Primary sources:

- IMF World Economic Outlook, October 2020
- UNCTAD and WTO merchandise and services trade statistics
- World Travel and Tourism Council Economic Impact Reports
- Korea Tourism Organization
- UNESCO tertiary education statistics
- South Korea Ministry of Education Study in Korea website
- South Korean oil reserves, production, and consumption statistics from Worldometer
- World Integrated Trade Database
- International Air Transport Association, Outlook for Air Travel over the next five years
- QS Survey: How Covid-19 is affecting prospective international students across subject areas
- WHO Universal Health Coverage indicators
- Bill & Melinda Gates Foundation, 2020 Goalkeepers Report

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